AMENDMENTS

Claims 1-6, 9, and 13-34 are pending.

Claims 9, 13-16, 22, 26, 27 and 29-34 have been amended.

Claims 7-8 and 10-12 have been cancelled.

Claims 1-6 and 16-27 have been withdrawn.

Support for the amendments is found in the claims and specification (e.g., pages 19-21; page 20, ln. 9; the Examples; Table2 on page 43), as originally filed.

No new matter is believed to have been added.

REMARKS/ARGUMENTS

The claimed copolymer provides cosmetic and pharmaceutical compositions with good performance properties (e.g., forming tack-free smooth films) and a good setting action, The claimed copolymers are suitable for the preparation of products in the form of gels. Page 3, ln. 7-11 of the pre4sent specification.

Claims 9, 28-32, and 34 are rejected under 35 U.S.C. 102(b) over Wilhelm et al., US 3,006,900. The rejection is traversed because Wilhelm et al. do not describe or suggest a copolymer obtained by free-radical polymerization of (a) acrylamide and/or methylacrylamide, (b) vinylpyrrolidone and/or vinylcaprolactam, and (c) vinylimidazole and/or derivatives thereof.

Wilhelm et al. describe co-polymers of 10-90 wt.% of vinylpyrrolidone and 90-10 wt.% of methacrylamide (Tables I-II, the Examples, and claim 1). Wilhelm et al. also describe that an additional co-polymer of other ethylenically-unsaturated carboxylic acid amide, e.g., acrylamide, crotoamide and furamic acid diamide, can be added in the amount of less then 50 wt.% in the quantity no greater than the proportion of methacrylamide (claim 4 and Examples 15 and 22).

However, Wilhelm et al. do not describe co-polymers based on vinylimidazole.

Thus, Wilhelm et al. do not anticipate the claimed copolymers.

Applicants request that the rejection be withdrawn.

Claims 13-15 and 33 are rejected under 35 U.S.C. 103(a) over Wilhelm et al. and Boeckh et al., US 5,773,541. The rejection is traversed because:

(1) the combination of the references does not describe or suggest a copolymer obtained by free-radical polymerization of (a) acrylamide and/or methylacrylamide, (b) vinylpyrrolidone and/or vinylcaprolactam, and (c) vinylimidazole and/or derivatives thereof.

(2) One would not have reasonably expected to achieved the claimed polymer that advantageously forms tack-free smooth films, has a good setting action, and is suitable for the preparation of products in the form of gel based on the mixing of various monomers of different polymers.

(3) One would not have been motivated to co-polymerize methacrylamide and vinylpyrrolidone monomers of Wilhelm et al. with vinylimidazole because (i) Boeckh et al. do not disclose selecting methacrylamide, vinylpyrrolidone, and vinylimidazole and co-polymerizing three monomers; (ii) the Boeckh et al. copolymers must also contain vinyl esters of aliphatic monocarboxylic acids and monoethylenically unsaturated carboxylic acids; and (iii) in the Boeckh et al. copolymers the total content of monomer mixtures (c) is 0-30 wt.%.

Wilhelm et al. describe co-polymers of 10-90 wt.% of vinylpyrrolidone and 90-10 wt.% of methacrylamide (Tables I-II, the Examples, and claim 1).

The Examiner has relied on Boeckh et al. for the monomer (c) (vinylimidazole or polyether acrylates).

Boeckh et al. describe a co-polymer of (a) vinyl esters of aliphatic monocarboxylic acids; (b) monoethylenically unsaturated cabroxylic acids, and, optionally, (c) 0-30%

(preferably 5-20%) of other copolymerizable monoethylenically unsaturated monomers and (d) monomers containing at least two non-conjugated ethylenic double bonds (col. 1-2, the bridging paragraph). The optional monomers (c) can be acrylamide, methacrylamide, vinylpyrrolidone, vinylimidazole and a large number of other monomers (col. 2, lines 45-65).

Although acrylamide, methacrylamide, vinylpyrrolidone, or vinylimidazole as a unit (c) can be co-polymerized with the monomers (a), (b) and (d) of Boeckh et al., Boeckh et al. do not disclose selecting all three monomers, i.e., methacrylamide, vinylpyrrolidone, and vinylimidazole, as the unit (c) for the co-polymerization with each other and the monomers (a), (b) and (d) from a long list of possible monomers. In fact, Boeckh et al. do not provide a singe example comprising methacrylamide, vinylpyrrolidone, and vinylimidazole. Boeckh et al. specifically describe a co-polymer comprising (a) vinyl acetate and/or vinyl propionate, and (b) acrylic acid (the Examples, claim 3).

Further, in Boeckh et al., optional monomers (c) are necessarily co-polymerized with vinyl esters of aliphatic monocarboxylic acids and monoethylenically unsaturated carboxylic acids, which are not present in the claimed copolymers and the Wilhelm et al. copolymers. Wilhelm et al. describe co-polymers of vinylpyrrolidone and methacrylamide (without vinylimidazole) that have good solubility in the wide range of pH.

One would not have reasonably expected that (i) methacrylamide, vinylpyrrolidone, and vinylimidazole would have produced a good soluble polymer in the entire pH range (the goal of Wilhelm et al.) OR that (ii) methacrylamide, vinylpyrrolidone, and vinylimidazole without vinyl esters of aliphatic monocarboxylic acids and monoethylenically unsaturated carboxylic acids can provide a good polymer for the goal of Boeckh et al.

Moreover, Boeckh et al. describe that the total content of optional monomers (c) (e.g., methacrylamide, vinylpyrrolidone, and vinylimidazole) is at most 30%, while in Wilhelm et al. describe co-polymers of 10-90 wt.% of vinylpyrrolidone and 90-10 wt.% of

methacrylamide (Tables I-II, the Examples, and claim 1). Thus, one would not have been motivated to combine vinylimidazole of Boeckh et al. with co-polymer of Wilhelm et al. because Boeckh et al. suggest using 0-30% of the total of methacrylamide, vinylpyrrolidone, and vinylimidazole, while Wilhelm et al.'s co-polymers is based on 10-90 wt.% of vinylpyrrolidone and 90-10 wt.% of methacrylamide.

Properties of polymers depend on structure, molecular weight, etc. The Examiner mixes and matches various units from different copolymers each of which has different structure and achieves a different goal, and concludes that so mixed copolymers yield "predictable results." However, the Examiner has not explained what results are predictable, e.g., a soluble polymers, high boiling point, rigidity, viscosity, decrease in decomposition of the vinyl esters, etc.

Further, this case does not involve "combination of familiar elements according to known methods" that "does no more than yield predictable results" because the Court stated that "[t]o the extend an art is unpredictable, as the chemical arts often are, *KSR*'s focus on these "identified, predictable solutions" may present a difficult hurdle because potential solutions are less likely to be genuinely predictable." *Eisai Co, Ltd. v. Dr. Reddy's Lab.*, 533 F.3d. 1353 (Fed. Cir. July 21, 2008). In addition, Boeckh et al. describe a great number of possible optional monomers (c) (col. 2, ln. 45-61) to be tested for improved properties of Wilhelm et al.'s co-polymers and the result of the testing is unpredictable (i.e., indefinite number of unpredictable potential solutions). *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727 (2007).

The Examiner has also alleged that one would have predicted "success" in producing the claimed invention. However, the Examiner has not explained why one would have expected "success" and what "success" is expected.

Lastly, the claimed co-polymer provides an advantageous result, as shown in the Examples.

Thus, Boeckh et al. and Wilhelm et al. do not make the claimed co-polymer obvious. Applicants request that the rejection be withdrawn.

A Notice of Allowance for all pending claims is requested.

Respectfully submitted,

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